Mathematics People

Joyce Wins Adams Prize

DOMINIC JOYCE of Lincoln College, Oxford University, has been awarded the Adams Prize for 2004 by the University of Cambridge. The Adams Prize is awarded each year by the Faculty of Mathematics and St. John's College to a young researcher based in the United Kingdom who is doing first-class international research in the mathematical sciences.

Joyce's research interests are chiefly in differential geometry, as well as in areas of theoretical physics. He is particularly concerned with the study of geometrical structures on manifolds and special holonomy groups.

The Adams Prize is named after the mathematician John Couch Adams and was endowed by members of St. John's College. It is currently worth £15,000 (approximately US$24,000), of which one-third is awarded to the prizewinner on announcement of the prize; one-third is provided to the prizewinner's institution (for research expenses of the prizewinner); and one-third is awarded to the prizewinner on acceptance for publication in an internationally recognized journal of a substantial (normally at least twenty-five printed pages) original survey article of which the prizewinner is an author.

—From a University of Oxford announcement

PECASE Awards Announced

Fifty-seven young researchers were chosen to receive the 2002 Presidential Early Career Awards for Scientists and Engineers (PECASE). This award is the highest honor bestowed by the U.S. government on outstanding young scientists, mathematicians, and engineers who are in the early stages of establishing their independent research careers.

Among the awardees are three who work in the mathematical sciences. GEORGE G. PAPPAS of the University of Pennsylvania and ROBERT W. GHRIST of the University of Illinois were nominated by the National Science Foundation. EDMOND CHOW of Lawrence Livermore National Laboratory was nominated by the Department of Energy.

The recipients were selected from nominations made by nine participating federal agencies. Each awardee receives a five-year grant of up to $750,000 to further his or her research and educational efforts.

—From an NSF announcement

Ferran Sunyer i Balaguer Prize Awarded

The Ferran Sunyer i Balaguer Foundation has awarded the 2004 Ferran Sunyer i Balaguer Prize to GUY DAVID of Université Paris-Sud for his monograph *Singular Sets of Minimizers for the Mumford-Shah Functional.*

The monograph is a complete exposition of the known results for the Mumford-Shah conjecture. Although this conjecture has its origins in image segmentation, David sees it as a model for a whole class of problems with free boundaries and a length of area term. The work is an extended study of the underlying variational problem.

The Ferran Sunyer i Balaguer Foundation (`http://www.crm.es/FerranSunyerBalaguer/ffsb.htm`) of the Institut d'Estudis Catalans awards this international prize every year to honor the memory of Ferran Sunyer i Balaguer (1912–1967), a self-taught Catalan mathematician who gained international recognition for his research in mathematical analysis. His achievements are the more impressive given the serious physical disabilities with which he was born.

—From a news release of the Ferran Sunyer i Balaguer Foundation

Mathé Receives 2004 Prize for Achievement in Information-Based Complexity

PETER MATHÉ of the Weierstrass Institute for Applied Analysis and Stochastics, Berlin, Germany, has been awarded the 2004 Prize for Achievement in Information-Based Complexity. His research interests are in the efficiency of numerical methods, including the complexity of Monte Carlo methods, the efficiency of Markov chain Monte Carlo methods, approximation theory, and the complexity of ill-posed problems.

The prize consists of $3,000 and a plaque. The award will be presented at the 2004 Workshop on Continuous Algorithms and Complexity at Schloss Dagstuhl, Germany, in September 2004.

—Joseph F. Traub, Columbia University

Allgöwer Wins Leibniz Prize

FRANK ALLGÖWER of the Universität Stuttgart has been awarded a 2004 Leibniz Prize by the Deutscheforschungsgemeinschaft, the main scientific research funding agency of the German government. The prize provides a research grant of 1.55 million euros (approximately US$1.8 million) over five years.

Allgöwer specializes in nonlinear systems and control theory. His work focuses on the control of technical systems such as energy supply networks, the Internet, and transport systems; and he has developed methods to analyze and influence these systems. His work links fundamental research and practical solutions to technical problems. He received his Ph.D. from the Universität Stuttgart and is currently head of the Institute for Systems Theory in Engineering at the university.

—Elaine Kehoe

Prizes of the Mathematical Society of Japan

The Mathematical Society of Japan (MSJ) has awarded its 2004 Spring Prize to TAKASHI KUMAGAI of Kyoto University and the Algebra Prize to TOMOHIDE TERASOMA of Tokyo University.

The Spring Prize is awarded each year to a mathematician who is not older than forty and who has made an outstanding contribution to mathematics. The Algebra Prize is awarded every year to a maximum of two algebraists in recognition of outstanding contributions in algebra.

—From an MSJ announcement

Szpiro Receives Media Prize

GEORGE SZPIRO has received the 2003 Prix Media from the Swiss Academy of Natural Sciences for his column about mathematics, "Kleines Einmaleins" ("Little [Multiplication] Table"), which appears monthly in the Swiss newspaper *Neue Zürcher Zeitung*. The prize carries a cash award of 10,000 Swiss francs (about US$7,800).

Trained as a mathematician, Szpiro is based in Jerusalem, Israel, as a political correspondent for the *Neue Zürcher Zeitung*. His book *Kepler's Conjecture: How Some of the Greatest Minds in History Helped Solve One of the Oldest Math Problems in the World* was published by John Wiley and Sons in 2003.

—Allyn Jackson

Putnam Prizes Awarded

The winners of the 64th William Lowell Putnam Competition have been announced. The Putnam Competition is administered by the Mathematical Association of America and consists of an examination containing mathematical problems that are designed to test both originality and technical competence. Prizes are awarded to both individuals and teams.

The five highest ranking individuals, listed in alphabetical order, were: REID W. BARTON, Massachusetts Institute of Technology; ANA CARAIANI, Princeton University; GABRIEL D. CARROLL, Harvard University; RALPH C. FURMANIAK, University of Waterloo; and DANIEL M. KANE, Massachusetts Institute of Technology.

Institutions with at least three registered participants obtain a team ranking in the competition based on the rankings of three designated individual participants. The five top-ranked teams (with team members listed in alphabetical order) were: Massachusetts Institute of Technology (Reid W. Barton, Daniel M. Kane, Yevgeny K. Zaytman); Harvard University (Gabriel D. Carroll, George Lee, Jr., Alexander B. Schwartz); Duke University (David G. Arthur, Nikifor C. Bliznashki, Oaz Nir); California Institute of Technology (Zhihao Liu, Po-Ru Loh, Po-Shen Loh); and Harvey Mudd College (David J. Gaebler, Jason Murcko, Andrew G. Niedermaier).

The top five individuals in the competition received cash awards of $2,500; the next ten received $1,000. The first-place team was awarded $25,000, with each team member receiving $1,000. The team awards for second place were $20,000 and $800; for third place, $15,000 and $600; for fourth place, $10,000 and $400; and for fifth place, $5,000 and $200.

The Elizabeth Lowell Putnam Prize is awarded periodically to a woman whose participation in the Putnam Competition is deemed particularly meritorious. In the recent competition, this prize went to ANA CARAIANI of Princeton University. The prize carries a cash award of $1,000.

—Elaine Kehoe

MATHEMATICS PEOPLE

USA Mathematical Olympiad

The thirty-third annual USA Mathematical Olympiad (USAMO) was held April 27 and 28, 2004. The students participating in the Olympiad were selected on the basis of their performances on the American High School and American Invitational Mathematics Examinations, which involved hundreds of thousands of students.

The twelve highest scorers in the USAMO, listed in alphabetical order, were: JAE BAE, Hackensack, New Jersey; JONGMIN BAEK, Cupertino, California; OLEG GOLBERG, Exeter, New Hampshire; MATT INCE, Chesterfield, Missouri; JANOS KRAMAR, Toronto, Ontario, Canada; TIANKAI LIU, Exeter, New Hampshire; ALISON MILLER, Niskayuna, New York; AARON PIXTON, Vestal, New York; BRIAN RICE, Dublin, Virginia; JACOB TSIMERMAN, Toronto, Ontario, Canada; AMEYA VELINGKER, Allentown, Pennsylvania; TONY ZHANG, Exeter, New Hampshire. Tiankai Liu received a perfect score.

The twelve USAMO winners will attend the Mathematical Olympiad Summer Program (MOSP) from June 13 through July 3. Then six of the twelve students will be selected as the United States team to compete in the International Mathematical Olympiad (IMO) to be held in Athens, Greece, July 6–18, 2004.

—Elaine Kehoe

American Academy of Arts and Sciences Elections

Eight mathematical scientists have been elected to membership in the American Academy of Arts and Sciences for 2004. They are: DAVID ALDOUS, University of California, Berkeley; LEONARD GROSS, Cornell University; ANATOLE KATOK, Pennsylvania State University; FANG-HUA LIN, Courant Institute of Mathematical Sciences, New York University; YURI I. MANIN, Northwestern University; GANG TIAN, Massachusetts Institute of Technology; NOLAN WALLACH, University of California, San Diego; and LAI-SANG YOUNG, Courant Institute of Mathematical Sciences, New York University. YVES COLIN DE VERDIÈRE, Université de Grenoble, France, was elected as a foreign honorary member.

The American Academy of Arts and Sciences was founded in 1780 to foster the development of knowledge as a means of promoting the public interest and social progress. The membership of the academy is elected and represents distinction and achievement in a range of intellectual disciplines: mathematical and physical sciences, biological sciences, social arts and sciences, and humanities and fine arts.

—From an AAAS announcement